New Endomychidae (Coleoptera) from Asia

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With 13 figures

ABSTRACT

Asymbius indicus n. sp. from India; Uttar Pradesh, A. sinensis n. sp. from China: Fukien, Mycetina maderi n. sp. from China: Fukien, M. sasajii n. sp. from Taiwan and Ectymychus nepalensis n. sp. from Nepal are described.

ARROW (1925: 398) presented an extensive diagnosis of the genus *Asymbius* and I recently brought together the descriptions of the 8 known species (Strohecker 1979), adding a ninth from Sabah. In a lot of Endomychidae sent to me for study by Dr. Ivan Löbl of the Geneva Museum are two additional species and two new species of *Mycetina*.

Among oriental endomychids the species of *Asymbius* are notable for the course of the parasutural striae, which, diverging from the apex forward, curve widely around the scutellum and then recurve along base and internal to umbo. This feature is somewhat similar to that seen in the holarctic genus *Symbiotes*. According to Sasaji (1978: 8–12) these two genera should be among those referred to the Mychotheninae.

In 5 species of Asymbius, A. crinipes Gorham, A. marginatus and A. hamulatus Arrow, A. formosanus Csiki and A. foveicollis Chujo, the pronotum is somewhat flattened at the sides, subangulately widened in front of middle, the margin there abruptly widened but strongly deflexed and thus invisible from above. In the other 4 species the pronotum is convex from side to side, its edges evenly curved, the margin widened forward, the widening visible in part from above. Of these 4 species A. claviger Arrow and A. gigas Strohecker have antennal club joints long-cylindric, their ensemble longer than the stalk. In A. minutus Arrow of Sumatra, apparently the most primitive form of the

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genus, the pronotal punctures are very fine, the parasutural stria but weakly impressed, the antenna rather short with articles 9-10 transverse in female.

The 2 new species are similar to *A. rufus* Arrow, forming with it a group characterized by high convexity, especially of pronotum, coarse pronotal punctation, deeply impressed parasutural striae, dark coloration, antennal club slightly shorter than stalk. Arrow (1925: 401) noted the length of *A. rufus* as 1.75 mm but my measurements with ocular micrometer of a series, including some syntypes, show lengths of 1.3–1.5 mm. The new forms are larger than *A. rufus*, the size difference more evident on direct comparison than the cited measurements may indicate.

Asymbius indicus n. sp. (fig. 1, 3)

Holotype: female, Inde: Garwhal (UP), 10 km E. de Dhanolti, 2450 m, 21.X.79, I. Löbl (Geneva Museum).

Legs and antennal stalk yellow-brown, club dusky, not black. Head and pronotum reddish brown, elytra dark brown, almost black, with a broad submarginal band of umber color. Pubescence sparse, erect. Antennal stalk slightly wider distad, article 8 globose, articles 9, 10 long-campaniform, 11 long-oval, 2× as long as wide. Pronotum roundly convex from side to side, margins evenly curved, wider toward front, hind angle slightly acute, area within it flat, horizontal, lateral sulcus (basal fovea) deltoid, shallow, bounded laterally by a low ridge, transverse sulcus deep and close to base. Elytra highly convex, about as wide as long, finely and sparsely punctate, margin wide below umbo but narrowed caudad. Parasutural stria sharply impressed, deeper in front and recurved along base and within umbo, which thus appears elevated. Elytral apex simple, from which 1 judge the specimen to be female. Length 1.6 mm, width 1.0 mm.

Similar to A. rufus but larger with longer antenna. The pronotum of A. rufus appears more narrowed to base because of the deflexed hind angles; the basal fovea is quite deep with high lateral ridge. The bicolored elytra of A. indicus is a feature unique in the genus as now known.

Asymbius sinensis n. sp. (fig. 2, 4)

Holotype: male, China: Fukien, Kuatun, 5.IV.46 (Tschung Sen). (Geneva Museum.) Allotype: female, same data as holotype (Geneva Museum).

Paratypes: 2 males, 2 females, same data as holotype except 25.X.46. Antennae of male paratypes damaged (Geneva Museum; author).

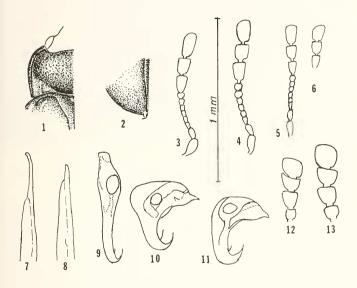
Legs yellow, antennal stalk brown, club black. Shining dark reddish brown, the pronotum almost black with its disc coarsely and rather closely punctate, its sides evenly curved, the margin rather strongly elevated, hind angles weakly acute, basal fovea similar to that of *A. indicus* but deeper and with higher lateral ridge. Antennal stalk rather stout, articles 7–8 globose, 10 quadrate, 11 but little longer than 9 and about 1.5 × as long as wide. Elytra as wide as long, highly convex, finely and sparsely punctured, margin wide in front, narrowed caudad. Length 1.8 mm, width 1.2 mm.

Elytral apex of male with tubercle surmounted with hairs, that of female simple. Other than this male feature no other external sexual difference has been found. This species is similar to *A. rufus* but larger, with longer and stouter antennae. Elytral apex of *A. rufus* male is somewhat extended, distinctly excavate and lacks tubercle.

Mycetina sasajii n. sp. (Fig. 8, 12)

Holotype: male, Taiwan: Alishan, 2400 m, 11.VI.77, J. u. S. Klapperich (Geneva Museum).

Short-oblong in form, dorsum shining. Antennae, head, prothorax, scutellum and legs black, tarsi yellow. Abdomen and elytra reddish orange. Length 3.5 mm, width 1.9 mm.



Figs. 1-13.

Fig. 1: Asymbius indicus sp. n., pronotum and elytral base. Fig. 2: Asymbius sinensis sp. n., apex of male elytron-paratype. Figs. 3-6: antenna (left); 3: A. indicus; 4: A. sinensis; 5: A. rufus male; 6: id., female. Figs. 7-11: aedeagus; 7: Mycetina minima (sensu meo); 8: Mycetina sasajii sp. n.; 9: M. laticollis Gorham; 10: M. (Phaeomychus) brevis Arrow-holotype; 11: M. (Phaeomychus) maderi sp. n.. Figs. 12-13: antennal club (right); 12: Mycetina sasajii sp. n.; 13: M.minima (sensu meo). Mm scale applies only to figs. 3-8.

Antenna rather stout, articles 3–5 subequal in length and about $1.5 \times$ as long as wide, article 8 as wide as long, 10 transverse with inner apical angle acute, 11 transverse and subtruncate. Pronotum $2 \times$ as wide (base) as long (mid-line), sides parallel to base, rounded to rectangular front angles, disc very finely punctured, lateral sulci narrowly deltoid, extending forward almost to mid-length, transverse sulcus deep. Elytra about $3 \times$ as long as pronotum, rather densely punctate.

Similar to specimens from near Dalat, Vietnam which I have identified as *M. minima* Pic (I found no specimens of this species in Pic coll.), but slightly larger and with slenderer antennae. It is also similar to *M. laticollis* Gorham of Japan, which, however, has stouter antennae and quite different aedeagus. For purpose of scale figure 9 was drawn from specimen from Kyoto but agrees entirely with my drawing from specimen bearing "Type" label in British Museum.

Mycetina (Phaeomychus) maderi n. sp. (Fig. 11)

Holotype: male, China: Fukien, Kuatun, 4.V.46. Tschung Sen (Geneva Museum). Allotype: same data except 25.IX.46 (Geneva Museum).

Form oblong, moderately convex, shining. Antennae, head, prothorax, scutellum and legs black, tarsi dark red. Abdomen and elytra reddish orange, a small black spot on umbo. Length 4.2 mm, width 2.2 mm.

Antenna rather stout but articles 3–8 each longer than wide, 3 longest and 2× as long as wide, 4–7 but little shorter than 3, 8 shortest; club abruptly formed but not broad, article 9 long-triangular, 10 slightly transverse, 11 short and truncate. Pronotum 1.75× as wide as long, sides narrowly margined, gently rounded to rectangular front angles, parallel basad, disc very finely punctured, punctures coarser at sides, lateral sulci narrow and parallel, confined to basal ½ of pronotum, transverse sulculs close to base. Elytra 3× as long as pronotum and not much wider. Gently widened from base to middle and gently convergent to apex, densely punctured. There are no conspicuous external sexual features; the front tibia of male is somewhat thicker distad than that of female.

The allotype bears a label "Mycetina sp., det. Mader" and is certainly one of the 3 unnamed specimens cited by MADER (1955: 69). The holotype also is probably from that series, which MADER stated could not be considered representative of M. superba Mader. The insect now at hand is very close to Phaeomychus brevis Arrow, described from a single male from Bao Ha in NW Viet Nam. A clear photograph of the Arrow type does not allow me to cite any external differences between it and the specimens now studied. The aedeagus of M.(P.) brevis is much wider at apex than that of M. maderi but similar, and this difference may prove to be of only racial or subspecific moment. I have cited the name Phaeomychus as subgeneric although I synonymized it in 1953. The aedeagi of the species referred to Mycetina indicate several divergent lines. The Japanese M. (Phaeomychus) rufipennis has elytra more rounded at sides than the forms treated above, and its aedeagus shows but moderate apical widening in dorsal view.

Ectomychus nepalensis n. sp.

Holotype: female, Nepal (Prov. Bagmati), Mere Dara, 3200 m, 8.IV.81, Löbl and Smetana (Geneva Museum).

Oblong in outline, moderately convex. Ventral surface, legs including tarsi, antennae, head, pronotum and scutellum black; elytra dark red. Length 2.9 mm, width 1.7 mm.

Antennal stalk slender, articles 1-4 elongate, 5-7 secularly shorter, 8 globose. Club relatively massive, abruptly formed, its first two articles medially angulate at apex, the last article regularly ovoid, longer than wide. Pronotum with sharply raised side margins, which are shallowly sulcate and somewhat narrowed to base, disc finely punc-

tate, lateral sulci deep, linear, not reaching mid-length of disc. Elytra 3 × as long as, and hardly wider at base than pronotum, gradually widened to about mid-length, then gradually convergent to apex, surface thickly, somewhat coarsely punctate, pubescence fine, erect and inconspicuous.



Fig. 14.

Mycotina (Phaeomychus) brevis Arrow; Holotype &.

The insect here described shares generic features with 4 species of *Ectomychus* from the Indian region treated by Arrow (1925: 367–370). In his key *nepalensis* would be associated with *E. monticola* in the first couplet. From all the species of Arrow's work *E. nepalensis* differs strikingly in coloration and from *E. monticola* in the fine punctation of pronotum. On the specimen now before me I do not see the conspicuous depressions behind middle and hind coxae noted by Arrow as features of *E. monticola*.

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